

Amendments to the Claims

1. (Currently Amended) Method for producing a payload data stream
5 comprising a header and a payload data block containing encrypted
payload data, comprising the following steps:
- generating a payload data key for a payload data encryption algorithm for
10 encrypting payload data, the payload data having a first section and a
second section, the first section and the second section including audio
data, video data, a combination of audio data and video data, text data or
binary data forming an executable program;
- 15 encrypting a the first section of the payload data using said payload data
key and said payload data encryption algorithm to obtain an encrypted
section of said payload data block of said payload data stream, wherein
a the second section of the payload data remains unencrypted;
- 20 processing the unencrypted second section of said payload data to
deduce information characterizing the unencrypted second section of
said payload data;
- linking said information and said payload data key by means of an
invertible logic linkage to obtain a basic value;
- 25 encrypting said basic value using a key of two keys being different from
each other by an asymmetrical encryption method, said two different
keys being the public and the private keys respectively for said
asymmetrical encryption method, to obtain an output value being an
30 encrypted version of said payload data key; and
- entering said output value into said header of said payload data stream.
2. (Original) Method according to claim 1, in which said payload data
35 encryption algorithm is a symmetrical encryption algorithm.
3. (Original) Method according to claim 1, in which said invertible logic
linkage is self-inverting and includes an XOR-linkage.

3 Application Serial No. 09/913,686

4. (Original) Method according to claim 1, in which one key of said two keys being different from each other is the private key of a producer of said payload data stream or the public key of a consumer of said payload data stream.
- 5
5. (Original) Method according to claim 1, in which said part of said payload data stream being processed to deduce said information includes at least a part of said header.
- 10
6. (Original) Method according to claim 1, in which said step of processing comprises forming a hash sum.
7. (Previously Presented) Method according to claim 1, further comprising the following step:
- 15
- identifying an algorithm being used in said step of processing by an entry into said header.
- 20
8. (Previously Presented) Method according to claim 1, further comprising the following step:
- entering license data into said header, said license data referring to in which way said payload data stream is allowed to be employed.
- 25
9. (Original) Method according to claim 8, in which said license data indicates how often said payload data stream is allowed to be replayed and how often it has already been replayed.
- 30
10. (Original) Method according to claim 8, in which said license data indicates how often the contents of said payload data stream is allowed to be copied and how often it has already been copied.
- 35
11. (Previously Presented) Method according to claim 8, in which said license data indicates from when on said payload data stream is no longer allowed to be employed.

12. (Original) Method according to claim 8, in which said license data indicates from when on said payload data stream is allowed to be decrypted.
- 5 13. (Original) Method according to claim 8, in which said part of said payload data stream being processed to deduce said information includes said license data.
- 10 14. (Original) Method according to claim 1, in which said step of processing further comprises the following substep:
- setting said entry for said output value in said header to a defined value and processing said entire header, including said entry set to a defined value.
- 15 15. (Original) Method according to claim 1, further comprising the following steps:
- identifying the supplier of said payload data stream by a supplier entry into said header;
- 20 identifying the user of said payload data stream by a user entry into said header of said payload data stream,
- 25 said supplier entry and said user entry belonging to said part of said payload data stream being processed to deduce said information.
16. (Original) Method according to claim 1, further comprising the following step:
- 30 identifying said payload data encryption algorithm by an entry into said header of said payload data stream.
17. (Currently Amended) Method for decrypting an encrypted payload data stream comprising a header and a payload data block containing a first section having encrypted payload data and a second section having unencrypted payload data, the first section and the second section including audio data, video data, a combination of audio data and video
- 35

5 Application Serial No. 09/913,686

5 data, text data or binary data forming an executable program, said
header comprising an output value having been generated by an
encryption of a basic value by an asymmetrical encryption method using
a key of two different keys including a private and a public key, said basic
value representing a linkage of a payload data key, with which said first
section having encrypted payload data is encrypted using a payload data
encryption algorithm, and information deduced by a certain processing of
the unencrypted second section of the payload data, said information
characterizing a certain part of said payload data stream unambiguously,
10 said method comprising the following steps:

obtaining said output value from said header;

15 decrypting said output value using the other key of said asymmetrical
encryption method to obtain said basic value;

processing the unencrypted second section of said payload data using
the processing method used when encrypting to deduce information
characterizing the unencrypted second section;

20 linking said information and said basic value using the corresponding
linkage as it has been used when encrypting to obtain said payload data
key; and

25 decrypting the first section containing the encrypted payload data using
said payload data key and said payload data encryption algorithm used
when encrypting.

18. (Original) Method according to claim 17, in which said header comprises
30 license information referring to In what way said payload data stream can
be employed.

19. (Original) Method according to claim 17, in which said part being
processed to deduce said information is said header.

35 20. (Original) Method according to claim 18, further comprising the following
steps:

checking whether said license information allows a decryption; and

if a decryption is not allowed, cancelling said decryption method.

- 5 21. (Original) Method according to claim 17, in which said header comprises a user entry, said method further comprising the following steps:

checking by means of said user entry whether a current user is authorized; and

10

if the user is not authorized, cancelling said decryption method.

- 15 22. (Original) Method according to claim 17, in which one key having been used when encrypting is the private key of said asymmetrical encryption method, while the other key having been used when decrypting is the public key of said asymmetrical encryption method.

- 20 23. (Original) Method according to claim 17, in which one key having been used when encrypting is the public key of said asymmetrical encryption method, while the other key having been used when decrypting is the private key of said asymmetrical encryption method.

- 25 24. (Original) Method according to claim 17, in which said step of processing includes forming a hash sum.

- 30 25. (Original) Method according to claim 17, in which a part of said header having been set to a defined value for said step of processing when encrypting is set to the same defined value for said step of processing when decrypting.

- 35 26. (Original) Method according to claim 25, in which said part of said header being set to a defined value includes said entry for said output value of said header.

27. (Original) Method according to claim 17, in which said step of linking comprises using an XOR-linkage.

28. (Currently Amended) Device for producing an encrypted payload data stream comprising a header and a payload data block containing encrypted payload data, comprising:

5 a generator for generating a payload data key for a payload data encryption algorithm for encrypting said payload data, the payload data having a first section and a second section, the first section and the second section including audio data, video data, a combination of audio data and video data, text data or binary data forming an executable program;
10

a first encryptor for encrypting ~~a~~ the first section of the payload data using said payload data key and said payload data encryption algorithm to obtain an encrypted section of said payload data block of said payload data stream, wherein ~~a~~ the second section of the payload data remains unencrypted;

a processor for processing the unencrypted second section of the payload data stream to deduce information characterizing the unencrypted second section of the payload data;

20 a linker for linking said information and said payload data key by means of an invertible logic linkage to obtain a basic value;

25 a second encryptor for encrypting said basic value using a key of two keys being different from each other by an asymmetrical encryption method, said two different keys being the public and the private keys respectively for said asymmetrical encryption method to obtain an output value being an encrypted version of said payload data key; and

30 means for entering said output value into said header of said payload data stream.

29. (Currently Amended) Device for decrypting an encrypted payload data stream comprising a header and a block containing a first section having encrypted payload data and a second section having unencrypted payload data, the first section and the second section including audio data, video data, a combination of audio data and video data, text data or
35

5 binary data forming an executable program, said header comprising an
output value having been generated by an encryption of a basic value by
an asymmetrical encryption method using a key of two different keys
including a private and a public key, said basic value representing a
linkage of a payload data key, with which said first section having
encrypted payload data is encrypted using a payload data encryption
algorithm, and information deduced by a certain processing of the
unencrypted second section of the payload data, said information
characterizing a certain part of said payload data stream unambiguously,
10 said device further comprising:

means for obtaining said output value from said header;

15 a first decryptor for decrypting said output value using said other key and
said asymmetrical encryption method to obtain said basic value;

20 a processor for processing the unencrypted second section of the
payload data using the processing method used when encrypting to
deduce information characterizing the unencrypted second section;

25 a linker for linking said information and said basic value using the
corresponding linkage as it has been used when encrypting to obtain
said payload data key; and

30 a second decryptor for decrypting the first section containing the
encrypted payload data using said payload data key and said payload
data encryption algorithm used when encrypting.

35 30. (Previously Presented) Device according to claim 28 or 29, which is
implemented as a personal computer, a stereo system, a car hi-fi
instrument, a solid state player or a replay instrument containing a hard
disk or a CD-ROM.

31. (Cancelled)